

Judging from Bates' remarks in the *Biologia* *O. landolti* is a variable species in Mexico and Central America and it is possible that the above described form is only a color variation of *landolti*. However, my material shows no intermediate forms and the specimens are either referable to *landolti* or *texanus*.

***Onthophagus brevifrons* Horn.**

Horn, Trans. Kans. Acad. Sci., Vol. VII, p. 76.

"Oval, slightly oblong, robust, convex. Head and thorax more shining, varying in color from bluish to violet or greenish metallic. Clypeus short and broad, very obtuse in front, the margin broadly reflexed, surface coarsely not densely punctured, suture indistinct. Front more densely and finely punctured. Vertex with a feebly elevated, transverse, sinuous ridge. Thorax very little wider than the elytra, anteriorly retuse, and concave at the sides, surface coarsely but sparsely punctured, with finer punctures intermixed, more densely punctured at the middle of the protuberance. Elytra broader than long, finely seven striate, the striæ obsolete, distantly punctulate, the outer striæ arcuate, intervals flat, irregularly biserially punctulate, each puncture with a short, erect hair; surface opaque, finely granulate, and with slight purple lustre. Body beneath sparsely punctate, abdomen with few finer punctures at the sides. Anterior tibiæ quadridentate, the upper tooth smaller. Length, .40 inch; 10 mm. Kansas, Texas."

"This species resembles *janus*, but is larger, more elongate, thorax more retuse in front and with a differently formed clypeus and cephalic ornamentation."

NEW SPECIES OF PSAMMOCHARIDÆ.

BY NATHAN BANKS,

WASHINGTON, D. C.

The new species here described belong mostly to two of the larger genera of the family, genera in which there are still numerous novelties yet to be collected in our country, particularly in the western parts.

POMPILOIDES.

This genus can be divided into two sections or subgenera; the typical one includes *P. cylindricus*; the pronotum in this section is angulate behind (except in *P. subviolaceus*), the third joint of antennæ in the female is plainly longer than the fourth joint, and there is no distinct comb to the front tarsi. The other section, which may be called *Nanopompilus*, since it includes *N. argentus*, has the pronotum arcuate or nearly straight behind; the female has a very distinct comb on the front tarsi, and the third joint of the antennæ is no longer than the fourth. This section includes *argenteus*, *consimilis*, *hyacinthinus*, *minusculus*, *padrinus*, and *parvus*, and of those with red on the abdomen, *rufibasis*, *autumnalis*, and *pretiosa*.

Pompiloides autumnalis new species.

Female.—Black, with basal half of abdomen red, and pronotum with a silvery hind margin. Clypeus truncate in front; front with long hair; vertex straight across, hairy; antennæ slender, third joint about three fourths of the vertex width, no long hair on basal joint beneath; posterior ocelli slightly nearer to eyes than to each other; pronotum broadly arcuate behind, posterior margin, except a median spot, with silvery pubescence, pronotum above with long hairs; metanotum short, rounded, with silvery pile, most noticeable on the sides, no long hair above, with a median line; abdomen red on first, second and most of third segments above, below red on the first and second segments, apical and ventral segments with long hairs. Legs slender, black, a few hairs under middle of femur I, all strongly spined, inner spur of hind tibia more than one half of metatarsus. Wings smoky, apex darker, third cell subtriangular, shorter than the second, receiving the second recurrent vein a little beyond the middle, basal vein interstitial with the transverse. Length, 10 to 12 mm.

From Ridgeway, Ontario, Canada, Sept. (Van Duzee), and Chicago, Ill., Sept. (Brues).

Differs from *P. scmirufus* in white-margined pronotum, in long hair on pronotum, and longer hair on front, and strong comb on anterior tarsi.

Pompiloides autumnalis var. *atlanticus* new variety.

This variety has been taken by Mr. Howard Shannon at Long Beach, L. I., in August and September on the sea beach. As far as I can see it does not differ much in structure from the typical form, but the pronotum is entirely black, no trace of the white posterior border, the wings are darker in all the

specimens seen. The posterior margin of the pronotum is a little more angulate than in the typical form. The comb on tarsus I is of the same long, broad spines, the vertex straight across, the abdomen with two segments below and two and a half above reddish, and the body (except propodeum) hairy as in the typical form.

Pompiloides reducta new species.

Related to *P. marginatus*, but antennæ shorter, and the vertex broader. Female.—Black; head, especially the clypeus with dull tawny pile, very few hairs except on orbits, pro and mesonotum also show tawny pile, second segment of abdomen mostly or wholly reddish above, tarsi dark brown; wings blackish, nearly evenly colored throughout, hind wings dusky. Clypeus truncate on margin, face scarcely narrowed above, vertex nearly straight across, posterior ocelli plainly nearer to eyes than to each other; antennæ with third joint plainly a little longer than the fourth, the second and third together do not equal vertex width; pronotum slightly angulate behind, metanotum with a faint median line; abdomen rather shorter than in *P. marginatus*, apical and ventral segments with long hairs; tarsus I without distinct comb, the spines hardly as long as width of the joint; inner spur of the hind tibiæ about two thirds as long as the metatarsus. Wings with the venation similar to that of *P. marginatus*, but the second discoidal cell is hardly as long as in that species. Length, 8 mm.

From Falls Church and Glencarlynn, Va., and Ridgeway, Ontario, Canada (Van Duzee), latter part of June to early August.

Pompiloides stenotus new species.

Black, rather shining, with silvery sheen, very distinct on face, pleuræ, coxæ, and metanotum. Clypeus truncate on margin, vertex scarcely rounded, posterior ocelli hardly nearer to eyes than to each other; pronotum angulate behind; metanotum with faint line in middle, abdomen very slender, no prominent hairs below, last dorsal segment with a pair of tufts of short hair near the middle of hind margin; legs slender, with very few, short spines, hind tibiæ with only three in row above, the inner spur about two thirds as long as the metatarsus. Wings blackish at tip, but nearly hyaline elsewhere, third submarginal petiolate, receiving the second recurrent beyond the middle. Length, 7 mm.

From Bradentown, Florida, March (Van Duzee).

Pompiloides clystera new species.

Male.—Similar to *P. cylindricus*. Deep black, but not silvery. Under each antenna, above base of clypeus, there is a patch of tawny brown hair each side; clypeus truncate on margin; head narrow, posterior ocelli plainly a little nearer to the eyes than to each other, vertex slightly, evenly rounded, occiput with black hairs, antennæ plainly heavier than *P. cylindricus*; pro-

notum plainly angulate behind; metanotum with median line above and excavate behind; abdomen slender, no distinct hairs on venter; legs slender, hind tibiæ with five spines above in a row, none near as long as width of the joint, inner spur nearly two thirds of metatarsus. Wings deep black throughout, third submarginal cell slightly petiolate, receiving the second recurrent vein at about middle. Length, 10 mm.

From Stanford Univ., Calif. (Doane).

Pompiloides solonus new species.

Female.—Deep blue black; clypeus broad, truncate in front, face narrowed above, posterior ocelli plainly closer to eyes than to each other, vertex straight across, antennæ long and slender, third joint about as long as vertex width, occiput with black hair; pronotum angulate behind; metathorax with impressed line; no row of hairs on basal ventral segments of abdomen; legs rather stout, hind tibiæ with five spines in row above, spines on tarsus I not twice the width of the joints. Wings deep blue black, third submarginal cell as long above as the second, receiving the second recurrent vein at the middle. Length, 10 mm.

From Garces, Arizona, August (Biedermann).

Pompiloides estellina new species.

Male.—Jet black; face below and at sides of the antennæ silvery, some silvery pubescence on the thorax, especially on posterior part of the metanotum; abdomen deep black; wings blackish, tip darker. Clypeus truncate below, face a little narrowed above, posterior ocelli slightly nearer the eyes than to each other, vertex nearly straight across, a number of long black hairs on the face and vertex; pronotum angulate behind, with a few long hairs above; metanotum short, with an impressed median line; abdomen slender, depressed, sessile, no hairs on the venter; spines on legs short, inner spur of the hind tibiæ a little more than one half as long as the metatarsus. Wings with marginal cell very short, second obliquely quadrate, third cell small, petiolate, receiving the second recurrent vein at the middle, second discoidal cell short, but not twice its length from the outer margin.

Female.—Similar to the male, abdomen broader; third joint of the antennæ plainly longer than the fourth; anterior tarsi without distinct comb, the spines straight and no longer than width of a joint. Length, male 8 mm., female 9 mm.

From National City, Calif., 15 May (Van Duzee). Related to *P. angularis*, but in that species the second discoidal cell is still shorter and fully twice its length from the outer margin of the wing.

Pompiloides rectus new species.

Black, with silvery pubescence, distinct on the face and thorax, especially each side at the tip of the metanotum. Clypeus truncate in front, antennæ

moderately heavy, posterior ocelli as near each other as to the eyes, vertex barely rounded, head with many black hairs; pronotum angulate behind; metanotum low and rather short, with a median line; abdomen slender, scarcely depressed above, with a few barely visible hairs below; legs with weaker bristles than in *P. cylindricus*, inner spur of hind tibiae about three fourths of the metatarsus. Wings hyaline, tip black, marginal cell very short, second and third submarginal cells also short, each higher than broad, the vein between them vertical, the third cell narrowed above, receiving the second recurrent vein at the middle, basal vein interstitial with the transverse.

Female.—Similar, but hardly silvery, the third joint of the antennae about three fourths of vertex width; inner spur of hind tibiae not three fourths of metatarsus; no comb on tarsus I; wings nearly uniform blackish, rather paler in the disc, venation as in the male. Length, male 8 to 10 mm., female 10 to 11 mm.

From Great Falls, and Chain Bridge, Va., in June; Ridgeway, Ontario, Can., and East Aurora, N. Y. (Van Duzee); and Black Mt., N. Car., May. Similar to *P. insolens*, but the cells shorter and the vein between them erect instead of inclined.

Psammochares hirsutifemur new species.

Female.—Purplish black; head and thorax rather densely black haired, much hair on clypeus, but no long hair on basal antennal joint, clypeus scarcely convex on margin; antennae short, third joint about one third of vertex width, vertex higher than eyes, nearly straight across, hairy; posterior ocelli little closer to each other than to the eyes; pronotum moderately long, arcuate behind; metanotum short, with median groove, densely long-haired; abdomen with first segment hairy on base, and on apical segments, and a few hairs on the ventral segments; legs moderately slender, with many spines, those on the hind tibiae one half the width of joint, inner spur about two fifths of the metatarsus, all femora densely long black-haired, the front femora hairy above, more hairy than any other species of this section, no comb on the tarsus I, claws with basal acute tooth. Wings deep violaceous black, hind pair hardly as dark, second submarginal about as long as broad, third narrowed at tip, receiving the second recurrent at the middle, this recurrent vein slightly bent outward in the middle, basal cross veins interstitial, veins not reaching margin. Length, 14 mm.

From Lemon Grove, 22 May, and Forster's, San Diego Co., 29 May, Calif. (Van Duzee).

Planiceps luxus new species.

Female.—In general similar to *P. niger*, but blue or green according to light; clypeus with long hairs, truncate on margin, ocelli forming a nearly equilateral triangle, the posterior ones hardly nearer to eyes than to each

other, vertex straight across, antennæ short, third joint not one half of vertex width; pronotum long, straight behind; metanotum with large, median depression behind; the abdomen no longer than thorax, with a few long hairs near tip; legs rather short, with short spines, inner spurs of hind tibiæ one half of the metatarsus, middle coxæ hairy below. Wings deep black, rather paler in discal area, two submarginal cells, the second, which is long, receiving the first recurrent vein at middle, the second recurrent considerably beyond the cell.

Male similar to female, but smaller; wings paler on basal part, the pronotum hardly as long, and more bent down in front, the posterior corners of the metanotum with dense silvery pile nearly reaching across, also a white stripe above on hind coxæ. Length, female 10 mm., male 7 to 8 mm.

From National City, Calif., 15 May (Van Duzee).

***Ageniella norata* new species.**

Male.—Black; head and thorax with silvery pile; abdomen rather shining black, last dorsal segment white. Clypeus slightly rounded below; antennæ long, third joint about two thirds of the vertex width, vertex rounded, with a few long hairs, posterior ocelli much closer to each other than to eyes; pronotum arcuate behind; metanotum long, sloping, no median groove, with dense white pile, especially on the sides; coxæ silvery, rest of legs dull black, tarsi rather brownish, spurs black, but those on leg I pale, inner one of hind tibiæ a little more than one half of the metatarsus; abdomen slender, almost petiolate, with very slight pale pile; wings hyaline, the apex blackish, third submarginal cell quite long, especially below, but above no longer than the second, receiving the second recurrent vein a little beyond middle, basal veins a little before the transverse. Length, 7 mm.

From Niagara Falls, N. Y., July (Van Duzee) and Falls Church, Va., July. Related to *A. petiolatus*.

***Ageniella praestans* new species.**

Slender; black, with silvery pubescence, very distinct on the face below antennæ, on thorax and coxæ, and less distinct on the abdomen. Clypeus rounded below, posterior ocelli hardly nearer each other than to eyes, vertex rather strongly rounded above, but one bristle each side by upper orbit, about as high as the lower ocellus; occiput white haired; pronotum strongly arcuate behind, metanotum long, sloping, with median line; abdomen subpetiolate, all black; legs long and slender, black, spurs black, inner one of hind tibiæ a little more than one half of the metatarsus. Wings faintly dusky, tip much darker, third submarginal cell about as long as the second, both longer than high, third receiving the second recurrent at middle, this recurrent quite strongly curved outward. Length, 6 mm.

From San Diego Co., June (Van Duzee) and Mts. near Claremont (Baker); both California. Differs from *A. euphorbiæ* in lack

of white spot at tip of abdomen, in position of second recurrent, and darker tipped wing.

Ageniella clypeata new species.

Male.—Black, with silvery pubescence, clypeus pale yellowish, vertex slightly rounded, no long hairs, posterior ocelli nearer to eyes than to each other, antennæ rather short; pronotum weakly angulate behind; metanotum low and sloping, with a median smooth line on the basal part, posterior corners with dense white pile; abdomen also sericeous, lower margin of segments pale; legs very long and slender, leg I (including coxæ) pale, other legs dark on femora and tibiæ at least above, hind tarsi darker, spurs white, inner one of hind tibia two thirds of the metatarsus. Wings faintly fumose, tips darker, third cell higher than long, angulate in the middle behind, receiving the second recurrent beyond the middle, this recurrent scarcely curved outward, in both fore wings there is from the juncture of the first recurrent with the second submarginal cell a short projection into the second discoidal cell. Basal veins interstitial. Length, 8.5 mm.

From Chain Bridge, Va., 14 June.

BEEES FROM ECUADOR AND PERU.

By T. D. A. COCKERELL,

BOULDER, COLORADO.

On his recent trip to South America, Professor C. T. Brues collected a very interesting series of bees, which are reported on herewith. I have included also a series collected by Mr. v. Buchwald at Guayaquil, transmitted to me by Mr. J. D. Alfken of Bremen, and a few collected by Professor Townsend in Peru.

Comparatively little has been known of the bees of Ecuador and Peru, so it is not surprising that many of the species are new. Reviewing the collection as a whole, the following points are of interest:

1. The species of the coast region of Ecuador and Peru are mostly distinct from those found elsewhere, though the Brazilian fauna is represented by a few unmodified forms, and a few are identical with species of Central America. Probably, as regards species, there are two rather distinct faunæ, that of Ecuador and adjacent parts of